

Paint Spraying

Potential Environmental Impacts:

Paint spraying has potential air and water quality impacts. Most paints contain volatile organic compounds (VOCs) which evaporate quickly and are ignitable. Many paints are also toxic. When released to the atmosphere, VOCs combine with combustion emissions of nitrogen oxides (NO_x) to form ground level ozone, which damages lungs and degrades many materials. Marine paint may be toxic to aquatic and marine life.

Legal Requirements:

- No air emission permit for use of paint spray guns is required from CT-DEP as long as you maintain purchase records for the past 5 years demonstrating that you have not purchased more than 1,500 gallons of VOC containing coatings including diluents and cleanup solvents but excluding water for the premises in any calendar year [RCSA §22a-174-3c]. For more information about air emission permits, contact CT-DEP's Bureau of Air Management at (860) 424-3027.
- You must determine if your painting wastes (including leftover paints, spray gun solvents, and rags) or any materials used to clean a spill, are hazardous [40 CFR 262.11; RCSA §22a-449(c)-102(a)(2)(A)]. If they are hazardous, they must be managed as described in Appendix B.
- If there is a stormwater discharge from your facility, you may have to register for a *General Permit for the Discharge of Stormwater Associated with Industrial Activity* ("Stormwater General Permit"). See Appendix F for more information.

Best Management Practices:

- ★ Avoid unprotected paint spraying. Paint spraying may be conducted:
 - inside designated structures with ventilation and filter systems;
 - at designated shore-side areas away from open water, with temporary structures or plastic sheeting provided to minimize the spreading of overspray; or
 - in covered slips, with tarps and sheeting installed with a tight seal between the vessel being worked on and the floats or walkway surface. Prohibit paint spraying on the water without protective sheeting. Be sure to remove the protective sheeting with care to prevent loss of accumulated waste material into the water.
- ★ If spraying outdoors with protective sheeting, avoid working on windy days when controlling the protective covering and the paint spray is difficult.
- ★ Use spray equipment with high transfer efficiency. Paint guns used in spray booths should be either High Volume Low Pressure (HVLP) or High Efficiency Low Pressure (HELP) which are rated at 65% efficient paint transfer. HVLP guns can reduce overspray by 25% to 50%.



Electrostatic spraying also requires less pressure, produces little overspray, and uses relatively little paint.

- ★ Encourage the use of non-toxic, high bonding, and easily cleaned hull coatings.
- ★ Limit the amount of leftover paint and decrease solvent use by using a smaller paint spray gun cup.
- ★ Reuse solvents and thinners by draining the clean product off the top once solids settle out.
- ★ Whenever possible, use brushes and rollers instead of paint sprayers since paint spraying is potentially more wasteful and more harmful to the environment than applying paint by hand.

Checklist for Clean Marina Certification:

- ✓ Do you conduct all paint spraying in a protective enclosure, where practical?

YES NO N/A

- ✓ Do you use spray equipment with high transfer efficiency such as HVLP or HELP spray guns?

YES NO N/A